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10/056,530	01/24/2002	Leonard L. Diaddario, JR.	PVO 2 0009	4334

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Scott A. McCollister
Fay, Sharpe, Fagan, Minnich & McKee, LLP
7th Floor
1100 Superior Avenue
Cleveland, OH 44114-2518

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EXAMINER

OLTMANS, ANDREW L

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,530

Applicant(s)

DIADDARIO, ET AL.

Examiner

Andrew L Oltmans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- ☐ Interview Summary (PTO-413) Paper No(s). ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1, 7-8, 11, 12 and 15-16 are objected to because the claims improperly contain periods in places other than at the end of the claim or in abbreviations (e.g. "a.", "b.", etc...).

See MPEP 608.01(m):

Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations. See Fressola v. Manbeck, 36 USPQ2d 1211 (D.D.C. 1995).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claims 1, 8, 11, 12 and 16, the phrase, "substantially free of an oxidizing agent", renders the claims indefinite because the claims necessarily contain nitrate ions, which are oxidizing agents. It is unclear whether the claims contain nitrate ions or are substantially free of an oxidizing agent.
- b. Claims dependent upon the above are likewise rejected under this statute.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Higgins 4,801,337

5. Claims 1-2 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Higgins 4,801,337 (Higgins).

Higgins teaches a coating composition for coating zinc coated articles (col 1, line 8) and the method of using the composition, wherein the composition contains Cr(III) ions, Co(II) ions, nitrate ions and water, wherein the ratio of nitrate to Cr+Co is within the claimed amount, wherein the composition is substantially free of Cr(VI) and wherein the composition is substantially free of an oxidizing agent, as instantly claimed in claims 1-2 and 11-12 (col 3):

A treatment solution suitable for spray application at 45° C. for 2 to 15 seconds is made by dissolving in water the following components.

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Co ²⁺ :	0.2 gl ⁻¹ - added as nitrate	
Cr ³⁺ :	0.2 gl ⁻¹ - added as acetate	
Fe ³⁺ :	0.15 gl ⁻¹ - added as nitrate	
Sodium Heptonate:	2.2 gl ⁻¹	35
NaOH:	19.0 gl ⁻¹	

The claims do not distinguish over the teachings of Higgins.

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Crotty 4,578,122

6. Claims 1-6 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Crotty 4,578,122 (Crotty).

Crotty teaches a coating composition for coating zinc coated articles (col 3, lines 28-34) and the method of using the composition, wherein the composition contains Cr(III) ions (col 3, lines 51-53; col 4, lines 17-22), Co(II) ions (col 3, line 62), nitrate ions (col 4, lines 42-56), water (col 3, line 47), film polishers, including fluoride salts (col 5, line 53), sulfate (col 4, lines 39-41) and wherein the pH is the 1.2 to 2.5 (col 3, lines 54), wherein the ratio of nitrate to Cr+Co is within the claimed amount, wherein the composition is substantially free of Cr(VI) and wherein the composition is substantially free of an oxidizing agent (note the 112-2nd paragraph rejection addressing the inclusion of nitrate), as instantly claimed in claims 1-6 and 11-12.

The claims do not distinguish over the teachings of Crotty.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Higgins 4,801,337

8. Claims 7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins 4,801,337 (Higgins).

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Higgins teaches and is applied as set forth above in paragraph 5. Higgins further teaches the Cr(III) content as being 0.3 to 3 g/L (col 2, lines 43-44), the Co(II) content (i.e. the polyvalent metal ion) is 0.15 to 0.4 g/L, wherein nitrate ion is in an amount corresponding the to the metal ion source (col 2, lines 5-8 and Example 1), wherein the concentrations of the Cr(III), Co (II) and nitrate appear to overlap the concentrations instantly claimed in claims 7 and 15. Higgins teaches a temperature range for treatment and time of contact that overlaps the temperature and time instantly claimed, as recited in claims 13 and 14 (col 2):

such as dip or, preferably, spray. Although the treatment temperature can be up to, for instance, 90° C. it is
65 preferably below 60° C. and most preferably below 50° C. Generally it is above 20° C. Although in many processes treatment temperatures of 35° to 50° C., typically

(col 3):

The duration of the treatment is generally from 2 to 60 seconds, preferably 5 to 30 seconds. In general the 5

Higgins fails to meet all the limitations of the instant claims in that Higgins does not explicitly teach the exact range of composition or process conditions.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the concentration of the components taught in the coating composition and the conditions (i.e. temperature and time) of the treatment taught by the reference overlaps that of the instant claims, In re Peterson, 65 USPQ2d 1379, In re Malagari, 182 USPQ 549, and MPEP 2144.05.

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Crotty 4,578,122

9. Claims 7-10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crotty 4,578,122 (Crotty).

Crotty teaches and is applied as set forth above in paragraph 6. The concentrations of the Cr, Co, nitrate, and fluoride salts and pH of the bath appear to overlap the concentrations recited in claims 7-10 and 15 (col 3, lines 28-34; col 3, lines 51-53; col 4, lines 17-22; col 3, line 62; col 4, lines 42-56; col 3, line 47; col 5, line 53). Crotty also teaches that the treatment takes place at a temperature and time of contact that overlap that of instant claims 13-14.

Crotty fails to meet all the limitations of the instant claims in that Crotty does not explicitly teach the exact range of composition or process conditions.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the concentration of the components taught in the coating composition and the conditions (i.e. temperature and time) of the treatment taught by the reference overlaps that of the instant claims, In re Peterson, 65 USPQ2d 1379, In re Malagari, 182 USPQ 549, and MPEP 2144.05.

Allowable Subject Matter

10. Claims 16-24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

A primary reason for the allowance of claims 16-24, under the above conditions, is that the prior art fails to teach or suggest, either alone or in combination, the instantly claimed method, wherein the method includes all of the claimed steps, including the conversion

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coating with the particular composition claimed, wherein the substrate is subsequently rinsed and exposed to a dye solution, as instantly claimed.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Oltmans whose telephone number is 703-308-2594. The examiner can normally be reached 7:00-3:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Andrew L. Oltmans
Examiner
Art Unit 1742

September 5, 2003